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PREPARATION OF DOUBLE METAL CYANIDE CATALYST

ABSTRACT

10 The present invention relates to a process for
the preparation of a double metal cyanide (DMC)
catalyst, which process involves:
(a) combining an aqueous solution of a metal salt
with an aqueous solution of a metal cyanide salt and
reacting these solutions; and
15 (b) recovering the DMC catalyst from the reaction
mixture,
in which process the DMC catalyst is prepared in the
presence of from 0.03 to 0.4 mole of alkaline metal
compound, based on amount of metal salt.

20 Further, the present invention relates to DMC
catalyst obtainable by such process, to DMC catalyst
prepared from a metal salt and a metal cyanide salt
in which the molar ratio of metal derived from the
metal salt to metal derived from the metal cyanide
25 salt is at least 2.25 and to a process for
polymerization of alkylene oxides which process
involves reacting initiator with alkylene oxide in
the presence of at most 15 ppm of DMC catalyst. It
also relates to a process for the polymerization of
30 alkylene oxides in which the resulting polyol
contains less than 60 ppm of ultra-high molecular
weight compounds.